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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,319	12/12/2003	Mervin G. Wood	11/2-22819/A/CGC 2136	2212

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EXAMINER

KLEMANSKI, HELENE G

ART UNIT PAPER NUMBER

1755

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/735,319

Applicant(s)

WOOD ET AL.

Examiner

Helene Klemanski

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 10-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 10-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/21/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Claims 1, 10-16 and 20-22 have been amended, claims 2-9 have been cancelled and no new claims have been added. Hence, claims 1 and 10-22 are pending in the application.

2. The provisional obviousness-type double patenting rejections to the claims as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn. The examiner acknowledges that applicants are willing to file a terminal disclaimer over co-pending application No. 10/762,077 to overcome the provisional obviousness-type double patenting rejection however, it is the examiner's position that this is not necessary since applicants have amended their claims. The present claims as now amended only read on dialkyl N-hydroxylamine salts whereas the amended claims of 10/762,077 no longer include dialkyl N-hydroxylamine salts.

3. The 102(b) rejections to the claims over WO02/055618 and Seltzer et al. ('724) as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn.

4. The 102(e) rejection to the claims over Biry as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn.

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5. The 103(a) rejections to the claims over Helling et al. and Seltzer et al. ('724) as set forth in the previous Office Action dated January 25, 2005 have been overcome by applicant's amendments and are now withdrawn.

Claim Rejections - 35 USC § 102

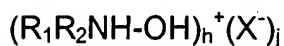
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. (US 2002/0088574).

Seltzer et al. (US 2002/0088574) teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and 0.001-5% by weight based on the pulp or paper of an N,N-dialkylhydroxylamine acid salt of the formula



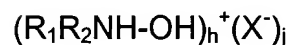
wherein R_1 and R_2 are independently C_{1-18} alkyl, C_{1-18} alkyl substituted by a hydroxyl group; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, etc. and the total charge of cations h is equal to the total charge of anions j. The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxanilides,

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benzoxazinones, benzoates and α -alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See paras. 0019-0059, paras. 0100-0104, paras. 0106-0110, examples 1, 3, 4 and 8-10 and claims 1-11, 35-37 and 41-43. The composition as taught by Seltzer et al. (US 2002/0088574) appears to anticipate the present claims.

8. Claims 1, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. (US 2002/0174964).

Seltzer et al. (US 2002/0174964) teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and 0.001-5% by weight based on the pulp or paper of an N,N-dialkylhydroxylamine acid salt of the formula



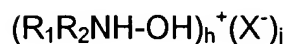
wherein R_1 and R_2 are independently C_{1-18} alkyl, C_{1-18} alkyl substituted by a hydroxyl group; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, etc. and the total charge of cations h is equal to the total charge of anions j. The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxaniludes, benzoxazinones, benzoates and α -alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See paras. 0017-0059, paras. 0100-0104, paras. 0106-0110, examples 1, 3,

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4 and 8-10 and claims 1-11, 35-37 and 41-43. The composition as taught by Seltzer et al. (US 2002/0174964) appears to anticipate the present claims.

9. Claims 1, 10-14 and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Seltzer et al. ('326).

Seltzer et al. ('326) teach a composition having reduced loss of brightness and enhanced resistance to yellowing which comprises pulp or paper which still contains lignin and 0.001-5% by weight based on the pulp or paper of an N,N-dialkylhydroxylamine acid salt of the formula



wherein R_1 and R_2 are independently C_{1-18} alkyl, C_{1-18} alkyl substituted by a hydroxyl group; X is an inorganic or organic anion such as phosphate, phosphonate, carbonate, bicarbonate, nitrate, chloride, bromide, bisulfite, sulfite, bisulfate, sulfate, borate, formate, acetate, benzoate, citrate, etc. and the total charge of cations h is equal to the total charge of anions j . The composition may further comprise UV absorbers such as benzotriazoles, s-triazines, benzophenones, α -cyanoacrylates, oxanilides, benzoxazinones, benzoates and α -alkyl cinnamates. It is preferable that the paper or pulp is chemimechanical or thermomechanical pulps or papers (i.e. recording mediums). See col. 3, line 20 – col. 5, line 12, col. 7, line 50 – col. 8, line 5, examples 1, 3, 4 and 8-11 and claims 1-11, 35-37 and 41-43. The composition as taught by Seltzer et al. ('326) appears to anticipate the present claims.

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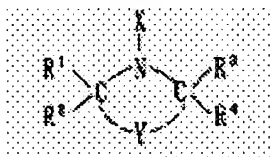
Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 10, 11, 15, 16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oki et al. ('597).

Oki et al. ('597) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula



wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R¹, R², R³ and R⁴ are independently H or alkyl with the proviso that any two of R¹ to R⁴ and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group such as -SO₃H, -P(O)(OH)(OR), -P(O)(OR)₂, carboxyl groups or salts thereof wherein R is an alkyl or aryl group. The recording liquid contains the hindered amine compound in an amount of 0.05-10 wt% and the recording medium contains the compound in an amount of 0.01-10 wt% in relation to the total weight of the receiving layer. The ink receiving layer may further contain UV absorbing agents. See col. 2, lines 18-25 and 42-47, col. 3, lines 4-11 and

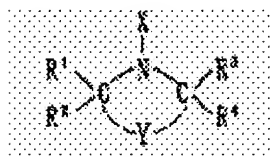
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27-31, col. 5, lines 9-45, col. 5, line 67 – col. 6, line 3, col. 6, lines 18-20, compounds (1-1) and (1-3)-(1-10), col. 8, lines 14-15, col. 12, lines 36-49, col. 13, lines 58-62, Table 1; Ink Compositions 1, 2, 6 and 7, col. 15, lines 38-43, Table 2, col. 17, lines 15-17 and 48-49, Table 3; Recording mediums a and b, Table 4 and claims 1, 2, 4-6, 10, 11 and 14-21. Oki et al. ('597) fails to specifically exemplify the use of a compound wherein at least one of R^1 , R^2 , R^3 and R^4 is H.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific compound wherein at least one of R^1 , R^2 , R^3 and R^4 is H as claimed by applicants as Oki et al. ('597) also discloses the use of these compounds but fails to show an example incorporating them.

12. Claims 1, 10, 11, 15, 16 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kitamura et al. (US 2003/0070582).

Kitamura et al. (US 2003/0070582) teach an ink-jet ink and/or an ink-jet recording medium containing a receiving layer comprising a compound of the formula



wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1 , R^2 , R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the compound has an anionic water-soluble group such as $-\text{SO}_3\text{H}$, $-\text{P}(\text{O})(\text{OH})(\text{OR})$, $-\text{P}(\text{O})(\text{OR})_2$, carboxyl groups or salts thereof wherein R is an alkyl or aryl group. The

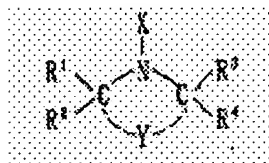
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recording liquid contains the hindered amine compound in an amount of at least 0.05-10 wt% and the recording medium contains the compound in an amount of at least 0.01-10 wt% in relation to the total weight of the receiving layer. The ink receiving layer may further contain UV absorbing agents. See paras. 0012-0014, paras. 0017-0022, para. 0033, paras. 0064-0067, compounds (1-1) to (1-7), paras. 0074-0075, paras. 0115-0117, para. 0125, para. 0129, Table 1, Table 3, Tables 5 and 6 and claims 1-5, 7 and 8. Kitamura et al. (US 2003/0070582) fails to specifically exemplify the use of a compound wherein at least one of R^1 , R^2 , R^3 and R^4 is H.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific compound wherein at least one of R^1 , R^2 , R^3 and R^4 is H as claimed by applicants as Kitamura et al. (US 2003/0070582) also discloses the use of these compounds but fails to show an example incorporating them.

13. Claims 1, 15, 17, 18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oki et al. ('735).

Oki et al. ('735) teach an aqueous ink composition comprising a colorant, a water-soluble organic solvent and an amine compound of the formula



wherein Y is a group of nonmetal atoms necessary to complete a five- to seven-membered ring; X is an oxy radical, alkoxy group, aryloxy group or hydroxy group; R^1 , R^2 , R^3 and R^4 are independently H or alkyl with the proviso that any two of R^1 to R^4 and Y may be connected to each other to form a 5- to 7-membered ring and wherein the

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compound has an anionic water-soluble group such as $-\text{SO}_3\text{H}$, $-\text{P}(\text{O})(\text{OH})(\text{OR})$, $-\text{P}(\text{O})(\text{OR})_2$, carboxyl groups or salts thereof wherein R is an alkyl or aryl group. The compound stops the progress of photo-oxidation reaction of colorants to inhibit photo-deterioration thereof and is therefore considered a light stabilizer. The recording liquid contains the hindered amine compound in an amount of 0.01-5 wt%. The recording liquid may further comprise an UV absorber such as a benzophenone or cyano acrylate based compound. See col. 4, lines 20-45, col. 5, lines 2-4 and 52-54, col. 6, lines 40-54, col. 7, lines 7-54, col. 9, lines 13-45, col. 11, lines 24-25, compounds 1-18, 23-26 and 33, Table 1; Examples A1-A5, col. 29, lines 56-57, col. 31, lines 40-43, examples B1-B3, col. 33, lines 10-11, Table 4; Examples C1 and C3, Table 7; examples D1-D5 and D7 and claims 1-5, 9-11 and 15-19. Oki et al. ('735) fails to specifically exemplify the use of a compound wherein at least one of R^1 , R^2 , R^3 and R^4 is H.

Therefore, it would have been obvious to one having ordinary skill in the art to use the specific compound wherein at least one of R^1 , R^2 , R^3 and R^4 is H as claimed by applicants as Oki et al. ('735) also discloses the use of these compounds but fails to show an example incorporating them.

Response to Arguments

14. Applicant's arguments with respect to claims 1 and 10-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

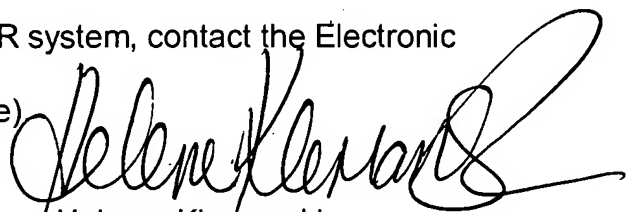
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The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)



Helene Klemanski
Primary Examiner
Art Unit 1755



HK
July 11, 2005